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**DOCKET NO. D-1990-080 CP-3**

**DELAWARE RIVER BASIN COMMISSION**

**Discharge to a Tributary of Special Protection Waters**

**Middle Smithfield Township  
Fernwood Wastewater Treatment Plant  
Middle Smithfield Township, Monroe County, Pennsylvania**

**PROCEEDINGS**

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by Gilmore & Associates, Inc. (Gilmore) on behalf of the Middle Smithfield Township (MST or docket holder) on February 27, 2012 (Application), for the renewal of an existing wastewater treatment plant (WWTP) discharge. Draft National Pollutant Discharge Elimination System (NPDES) Permit No. PA0060089 for this project was issued by the Pennsylvania Department of Environmental Protection (PADEP) on August 1, 2011. Commission staff expect the final Permit to be issued shortly.

The Application was reviewed for continuation of the project in the Comprehensive Plan and approval under Section 3.8 of the *Delaware River Basin Compact*. The Monroe County Planning Commission has been notified of pending action. A public hearing on this project was held by the DRBC on September 12, 2012.

**A. DESCRIPTION**

1. **Purpose.** The purpose of this docket is to renew approval of the existing 1.0 million gallons per day (mgd) Fernwood WWTP and its related discharge.

2. **Location.** The WWTP will continue to discharge treated effluent to the Bush Kill, within the drainage area to the Middle Delaware Special Protection Waters (SPW) area, at River Mile 226.9 – 2.3 (Delaware River – Bush Kill) via Outfall No. 001, in the Middle Smithfield Township, Monroe County, Pennsylvania as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	41° 05' 02"	75° 01' 23"

3. **Area Served.** The Fernwood WWTP will continue to serve Middle Smithfield Township. For the purpose of defining the Area Served, Section B (Type of Discharge) and D (Service Area) of the docket holder's Application are incorporated herein by reference, to the extent consistent with all other conditions contained in the DECISION Section of this docket.

4. **Physical Features.**

a. **Design Criteria.** The docket holder operates the existing 1.0 mgd Fernwood WWTP.

b. **Facilities.** The existing WWTP consists of a bar screen, parshall flume, an equalization tank, two (2) sequencing batch reactor (SBR) units, a decant equalization tank, an aerobic sludge digestion tank, a filter press, and an ultraviolet disinfection system.

The docket holder's wastewater treatment facility discharges to waters classified as SPW and is required to have available emergency power. The existing WWTP has a generator installed capable of providing emergency power. (SPW)

The docket holder's wastewater treatment facility is not staffed 24 hours per day, and shall have a remote alarm system that continuously monitors plant operations. The existing WWTP has a remote alarm system installed that continuously monitors plant operations. (SPW)

The docket holder's expanding/existing/new wastewater treatment facility has prepared and implemented an emergency management plan (EMP) in accordance with Commission requirements. (SPW)

The project facilities aren't located in the 100-year floodplain.

Wasted sludge will continue to be hauled off-site by a licensed hauler for disposal at a (State-approved) facility.

c. **Water withdrawals.** The potable water supply in the project service area is supplied by individual on-lot wells.

d. **NPDES Permit / DRBC Docket.** Draft NPDES Permit No. PA0060089 was issued by the PADEP on August 1, 2011 and includes effluent limitations for the project discharge of 1.0 mgd to surface waters classified by the PADEP as a high quality trout stocking fishery (HQ-TSF). The following average monthly effluent limits are among those listed in the NPDES Permit and meet or are more stringent than the effluent requirements of the DRBC.

**EFFLUENT TABLE A-1: DRBC Parameters Included in NPDES Permit**

<b>OUTFALL 001 (WWTP)</b>		
<b>PARAMETER</b>	<b>LIMIT</b>	<b>MONITORING</b>
pH (Standard Units)	6 to 9 at all times	As required by NPDES Permit
Total Suspended Solids	30 mg/l	As required by NPDES Permit
Dissolved Oxygen	6.0 mg/l (minimum at all times)	As required by NPDES Permit

OUTFALL 001 (WWTP)		
PARAMETER	LIMIT	MONITORING
CBOD (5-Day at 20° C)	25 mg/l (85% minimum removal*)	As required by NPDES Permit
Ammonia Nitrogen (5-1 to 10-31) (11-1 to 4-30)	3.0 mg/l 9.0 mg/l	As required by NPDES Permit
Fecal Coliform (5-1 to 9-30) (10-1 to 4-30)	200 colonies per 100 ml as a geo. avg. 2000 colonies per 100 ml as a geo. avg.	As required by NPDES Permit

\* DRBC Requirement

**EFFLUENT TABLE A-2: DRBC Parameters Not Included in NPDES Permit**

OUTFALL 001 (WWTP)		
PARAMETER	LIMIT	MONITORING
Total Dissolved Solids*	1,000 mg/l *	Quarterly **
Total Phosphorus*	Monitor & Report *	Monthly *
Nitrate + Nitrite as N*	Monitor & Report *	Monthly *
TKN*	Monitor & Report *	Monthly *

\* DRBC Requirement

\*\* See DECISION Condition II.r.

e. **Cost.** There are no construction costs associated with this renewal.

f. **Relationship to the Comprehensive Plan.** Issuance of Docket No. D-90-80 CP on March 27, 1991 included approval of the 1.0 mgd Fernwood WWTP in the Comprehensive Plan. Issuance of this docket will continue the prior approval in the Comprehensive Plan (See DECISION Condition I.c.).

## B. FINDINGS

The purpose of this docket is to renew approval of the existing 1.0 million gallons per day (mgd) Fernwood WWTP and its related discharge.

In 1992, the DRBC adopted SPW requirements, as part of the DRBC *Water Quality Regulations (WQR)*, designed to protect existing high water quality in applicable areas of the Delaware River Basin. One hundred twenty miles of the Delaware River from Hancock, New York downstream to the Delaware Water Gap has been classified by the DRBC as SPW. This stretch includes the sections of the river federally designated as "Wild and Scenic" in 1978 -- the Upper Delaware Scenic and Recreational River and the Delaware Water Gap National Recreation Area -- as well as an eight-mile reach between Milrift and Milford, Pennsylvania which is not federally designated. The SPW regulations apply to this 120-mile stretch of the river and its drainage area. (Upper/Middle SPW)

On July 16, 2008, the DRBC approved amendments to its *WQR* that provide increased protection for waters that the Commission classifies as SPW. The portion of the Delaware River and its tributaries within the boundary of the Lower Delaware River Management Plan Area was approved for SPW designation and clarity on definitions and terms were updated for the entire program. (Upper/Middle SPW)

Article 3.10.3A.2.e.1). and 2). of the Commission's *WQR* states that projects subject to review under Section 3.8 of the Compact that are located in the drainage area of SPW must submit for approval a Non-Point Source Pollution Control Plan (NPSPCP) that controls the new or increased non-point source loads generated within the portion of the docket holder's service area which is also located within the drainage area of SPW. The service area of the docket holder is located within in the drainage area to the SPW. Since this project does not entail additional construction and expansion of facilities/service area (i.e., there aren't any new or increased non-point source loads associated with this approval), the NPSPCP requirement is not applicable at this time. Accordingly, DECISION Condition II.n. has been included in this docket.

An expansion of the WWTP in 2007 was contemplated. However, after receiving draft effluent limitations for a stream discharge from the DRBC it was determined by the docket holder that it was not feasible to proceed with the expansion.

At the project site, the Bush Kill has an estimated seven-day low flow with a recurrence interval of ten years of 6.17 mgd (9.54 cfs). The ratio of this low flow to the design wastewater discharge from the 1.0 mgd WWTP is 6.17 to 1.

The nearest surface water intake of record for public water supply downstream of the Fernwood WWTP discharge is operated by the City of Easton, approximately 43.8 river miles away on the Delaware River.

The project does not conflict with the Comprehensive Plan and is designed to prevent substantial adverse impact on the water resources related environment, while sustaining the current and future water uses and development of the water resources of the Basin.

The limits in the NPDES Permit are in compliance with Commission effluent quality requirements, where applicable.

The project is designed to produce a discharge meeting the effluent requirements as set forth in the Commission's *WQR*.

### **C. DECISION**

I. Effective on the approval date for Docket No. D-1990-080 CP-3 below:

a. The project described in Docket No. D-90-80 CP-2 is removed from the Comprehensive Plan to the extent that it is not included in Docket No. D-1990-080 CP-3; and

b. Docket No. D-90-80 CP-2 is terminated and replaced by Docket No. D-1990-080 CP-3; and

c. The project and the appurtenant facilities described in Section A “Physical Features” of this docket shall be added to the Comprehensive Plan.

II. The project and appurtenant facilities as described in Section A “Physical Features” of this docket are approved pursuant to Section 3.8 of the *Compact*, subject to the following conditions:

a. Docket approval is subject to all conditions, requirements, and limitations imposed by the PADEP in its NPDES Permit, and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission’s.

b. The facility and operational records shall be available at all times for inspection by the DRBC.

c. The facility shall be operated at all times to comply with the requirements of the Commission’s *WQR*.

d. The docket holder shall comply with the requirements contained in the Effluent Tables in Section A.4.d. of this docket. The docket holder shall submit the required monitoring results directly to the DRBC Project Review Section. The monitoring results shall be submitted annually, absent any observed limit violations, by January 31. If a DRBC effluent limit is violated, the docket holder shall submit the result(s) to the DRBC within 30 days of the violation(s) and provide a written explanation that states the action(s) the docket holder has taken to correct the violation(s) and protect against any future violations.

e. Except as otherwise authorized by this docket, if the docket holder seeks relief from any limitation based upon a DRBC water quality standard or minimum treatment requirement, the docket holder shall apply for approval from the Executive Director or for a docket revision in accordance with Section 3.8 of the *Compact* and the *Rules of Practice and Procedure*.

f. If at any time the receiving treatment plant proves unable to produce an effluent that is consistent with the requirements of this docket approval, no further connections shall be permitted until the deficiency is remedied.

g. Nothing herein shall be construed to exempt the docket holder from obtaining all necessary permits and/or approvals from other State, Federal or local government agencies having jurisdiction over this project.

h. The discharge of wastewater shall not increase the ambient temperatures of the receiving waters by more than 5°F until stream temperatures reach 50°F, nor by more than 2°F when stream temperatures are between 50°F and 58°F, nor shall such discharge result in stream temperatures exceeding 58°F.

i. The docket holder is permitted to treat and discharge wastewaters as set forth in the Area Served Section of this docket, which incorporates by reference Sections B (Type of Discharge) and D (Service Area) of the docket holder's Application to the extent consistent with all other conditions of this DECISION Section.

j. The docket holder shall make wastewater discharge in such a manner as to avoid injury or damage to fish or wildlife and shall avoid any injury to public or private property.

k. No sewer service connections shall be made to newly constructed premises with plumbing fixtures and fittings that do not comply with water conservation performance standards contained in Resolution No. 88-2 (Revision 2).

l. Nothing in this docket approval shall be construed as limiting the authority of DRBC to adopt and apply charges or other fees to this discharge or project.

m. The issuance of this docket approval shall not create any private or proprietary rights in the waters of the Basin, and the Commission reserves the right to amend, suspend or rescind the docket for cause, in order to ensure proper control, use and management of the water resources of the Basin.

n. Prior to allowing connections from any new service areas or any new developments, the docket holder shall either submit and have approved by the Executive Director of the DRBC a NPSPCP in accordance with Section 3.10.3.A.2.e, or receive written confirmation from the Executive Director of the DRBC that the new service area is in compliance with a DRBC approved NPSPCP.

o. Unless an extension is requested and approved by the Commission in advance, in accordance with paragraph 11 of the Commission's Project Review Fee schedule (Resolution No. 2009-2), the docket holder is responsible for timely submittal of a docket renewal application on the appropriate DRBC application form at least 12 months in advance of the docket expiration date set forth below. The docket holder will be subject to late charges in the event of untimely submittal of its renewal application, whether or not DRBC issues a reminder notice in advance of the deadline or the docket holder receives such notice. In the event that a timely and complete application for renewal has been submitted and the DRBC is unable, through no fault of the docket holder, to reissue the docket before the expiration date below (or the later date established by an extension that has been timely requested and approved), the terms and conditions of the current docket will remain fully effective and enforceable against the docket holder pending the grant or denial of the application for docket approval.

p. The Executive Director may modify or suspend this approval or any condition thereof, or require mitigating measures pending additional review, if in the Executive Director's judgment such modification or suspension is required to protect the water resources of the Basin.

q. Any person who objects to a docket decision by the Commission may request a hearing in accordance with Article 6 of the Rules of Practice and Procedure. In

accordance with Section 15.1(p) of the Delaware River Basin Compact, cases and controversies arising under the Compact are reviewable in the United States district courts.

r. The docket holder may request of the Executive Director in writing the substitution of specific conductance for TDS. The request should include information that supports the effluent specific correlation between TDS and specific conductance. Upon review, the Executive Director may modify the docket to allow the substitution of specific conductance for TDS monitoring.

s. The docket holder is prohibited from treating/pre-treating any hydraulic fracturing wastewater from sources in or out of the Basin at this time. Should the docket holder wish to treat/pre-treat hydraulic fracturing wastewater in the future, the docket holder will need to first apply to the Commission to renew this docket and be issued a revised docket allowing such treatment and an expanded service area. Failure to obtain this approval prior to treatment/pre-treatment will result in action by the Commission.

**BY THE COMMISSION**

**DATE APPROVED:**

**EXPIRATION DATE: September 12, 2017**